Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERIC M. BREITUNG,
EELCO M.S. van HAMERSVELD,
DANIEL ROBERT OLSON
and MARC BRIAN WISNUDEL

Appeal No. 2003-1892
Application No. 09/681,288

ON BRIEF

Before GARRIS, JEFFREY T. SMITH and PAWLIKOWSKI, ***Administrative Patent Judges***.

JEFFREY T. SMITH, ***Administrative Patent Judge.***

DECISION ON APPEAL

Applicants appeal the decision of the Primary Examiner finally rejecting claims 1 to 23 and 26 to 32.[1] We have jurisdiction under 35 U.S.C. § 134.[2]

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[1] According to the Examiner, Final Rejection page 1, the subject matter claims 24 and 25 has been allowed.

[2] In rendering this decision, we have considered Appellants' arguments presented in the Brief filed January 21, 2003 and the Reply Brief filed June 03, 2003.

BACKGROUND

Appellants' invention relates to limited play data storage media, wherein the stored data can be used for a limited period of time. According to Appellants, programs which are to be used for a limited period of time such as computer programs, music and movies can be stored on the limited play storage media. (Brief, p. 2). Claims 1, 19, 20 and 24 which are representative of the claimed invention, appear below:

> 1. A limited play optical storage media, comprising:
>
> an optically transparent substrate;
>
> a reflective layer;
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> a data storage layer disposed between said substrate and said reflective layer;
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> an oxygen penetrable UV coating disposed on a side of said substrate opposite said data storage layer; and
>
> a reactive layer disposed between said UV coating and said substrate, wherein said optical storage media has an initial percent reflectivity of about 50% or greater and a subsequent percent reflectivity of about 45% or less.
>
> 19. A limited play optical storage media, comprising:
>
> an optically transparent substrate;
>
> a reflective layer;

a data storage layer disposed between said substrate and said reflective layer;

an oxygen penetrable UV coating disposed on a side of said substrate opposite said data storage layer, wherein said UV coating allows a reflectivity from said optical storage media of about 50% or greater; and

a reactive layer disposed between said UV coating and said substrate, wherein said optical storage media has an initial percent reflectivity of about 50%, said reactive layer comprises polymethylmethacrylate/leuco methylene blue.

20. A method for limiting access to data disposed on a data storage media, comprising:

directing a light toward at least a portion of said data storage media, wherein at least a portion of said light passes through a UV coating, a reactive layer, a substrate, and a data storage layer;

reflecting at least a portion of said light back through said substrate, said reactive layer, and said UV coating; and

reducing the percent reflectivity of said data storage media to less than about 45%.

CITED PRIOR ART

As evidence of unpatentability, the Examiner relies on the following prior art:

Hu et al. (Hu)	3,768,976	Oct. 30, 1973

Izu et al. (Izu)	4,332,880	Jun. 1, 1982
Barzynski	4,523,208	Jun. 11, 1985
Shinkai et al. (Shinkai)	5,368,988	Nov. 29, 1984
Nishida et al. (Nishida)	5,753,412	May 19, 1998
Rollhaus et al. (Rollhaus)	6,011,772	Jan. 4, 2000
Takagishi et al. (Takagishi)	6,168,844	Jan. 2, 2001 (Filed Aug. 3, 1998)
Lawandy et al. (Lawandy)	6,338,933	Jan. 15, 2002 (Filed Jun. 24, 1999)
Enmanji et al (Enmanji) (Published Japanese patent application)	JP 60-213938	Oct. 26, 1985

The Examiner rejected claims 1 to 9, 20 to 23 and 26 to 29 under 35 U.S.C. § 103(a) as unpatentable over the combination of Rollhaus and either one of Nishida, Shinkai or Takagishi; claims 1 to 9, 11 to 14, 20 to 23, 26 to 29, 31 and 32 under 35 U.S.C. § 103(a) as unpatentable over the over the combination of Rollhaus, Lawandy and either one of Nishida, Shinkai or Takagishi; claims 1 to 23 and 26 to 32 under 35 U.S.C. § 103(a) as unpatentable over the over the combination of Rollhaus, Lawandy and either one of Nishida, Shinkai or Takagishi, further combined with Enmanji and Barzynski; and claims 1 to 23 and 26 to 32

under 35 U.S.C. § 103(a) as unpatentable over the over the combination of Rollhaus, Lawandy and either one of Nishida, Shinkai or Takagishi, combined with Enmanji and Barzynski further combined with Izu and Hu. (Answer pp. 3-10).

DISCUSSION

Upon careful review of the respective positions advanced by Appellants and the Examiner, we find ourselves in agreement with Appellants' position in that the Examiner has failed to carry the burden of establishing a ***prima facie*** case of obviousness. ***See In re Oetiker,*** 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); ***In re Piasecki,*** 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). Accordingly, we will not sustain the Examiner's rejections. We will limit our discussion to independent claims 1, 19 and 20.

According to the Examiner, Rollhaus discloses the use of read inhibiting means, such as leuco dyes, which become colored upon exposure to oxygen. The read inhibiting means can be placed in the laser reading path of polycarbonate substrates. Rollhaus discloses the read inhibiting means can be coated with protective layers and semi-permeable oxygen barrier layers. Rollhaus fails to disclose the composition of the protective layer and semi-permeable oxygen barrier layer. (Answer, p. 3).

Claims 1 and 19 require an oxygen penetrable UV coating disposed to be on a side of the substrate opposite the data storage layer. Claim 20 requires light to be toward at least a portion of data storage media, wherein at least a portion of the light passes through a UV coating, a reactive layer, a substrate, and a data storage layer. According to Appellants, Rollhaus does not teach using a UV coating as the oxygen penetrable barrier. (Brief, p. 8).

The Examiner appreciates that Rollhaus does not disclose an oxygen penetrable UV coating, but it is the Examiner's position that Rollhaus' disclosure of the use of a semi-permeable oxygen barrier layer would have suggested the inclusion of a protective layer. Based on the disclosures in Nishida, Shinkai or Takagishi of protective layers comprising UV curable resins, the Examiner concludes that it would have been ***prima facie*** obvious for one of ordinary skill in the art to employ these known protective layer materials as the overcoat for read inhibiting leuco dyes with the expectation that these known materials would provide some oxygen permeability and provide protection from mechanical damage. (Answer, p. 5).

The flaw in the Examiner's reasoning is that Nishida, Shinkai and Takagishi do not disclose that the protective layers comprising UV curable resins are oxygen

permeable. Hence, the Examiner has not established the requisite motivation for one of ordinary skill in the art to use the a reactive layer disposed between an oxygen permeable UV coating and the substrate layer of an optical recording media described by Nishida, Shinkai or Takagishi. In addition, the Examiner has not established that the protective layers comprising UV curable resins described by Nishida, Shinkai and Takagishi would necessarily, or inherently have oxygen permeability. We find that the Examiner has not adequately refuted Appellants' argument that the teachings of Rollhaus are mutually exclusive from Nishida, Shinkai and Takagishi. (Brief, p. 12).

We agree with the Appellants that Nishida, Shinkai and Takagishi do not desired limited reflectivity as disclosed by Rollhaus and the Examiner's rejection is premised on hindsight. (Brief, p. 12). The record indicates that the motivation relied upon by the Examiner for selection of an oxygen permeable protective layer comprising UV curable resins comes from the Appellants' description of their invention in the specification rather than coming from the applied prior art and that, therefore, the Examiner used impermissible hindsight in rejecting the claims. ***See W.L. Gore & Associates v. Garlock, Inc.,*** 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983); ***In re Rothermel,*** 276 F.2d 393, 396, 125 USPQ 328, 331 (CCPA 1960). Accordingly, we reverse the Examiner's rejection under 35 U.S.C.

§ 103(a) over the combination of Rollhaus and either one of Nishida, Shinkai or Takagishi.

The Examiner added the Lawandy reference to the combination of Rollhaus, and either one of Nishida, Shinkai or Takagishi to reject the subject matter of claims 1 to 9, 11 to 14, 20 to 23, 26 to 29, 31 and 32 under 35 U.S.C. § 103(a). According to the Examiner, Lawandy teaches the use of Teflon or polyurethane as an oxygen diffusion barrier for optical media. (Answer, p. 7).

The Lawandy reference does not remedy the flaw in the Examiner's reasoning identified above. Specifically, that Nishida, Shinkai and Takagishi do not disclose that the protective layers comprising UV curable resins are oxygen permeable. Here again the Examiner has not established the requisite motivation for one of ordinary skill in the art to use the a reactive layer disposed between an oxygen permeable UV coating and the substrate layer of an optical recording media as required by the claimed invention.

The Examiner added Enmanji and Barzynski to the combination of Rollhaus, Lawandy and either one of Nishida, Shinkai or Takagishi to reject the subject matter of claims 1 to 23 and 26 to 32 under 35 U.S.C. § 103(a). The Examiner also added the Izu and Hu references to the combination of Rollhaus, Lawandy and either one of Nishida, Shinkai or Takagishi combined with Enmanji and Barzynski to reject the

subject matter of claims 1 to 23 and 26 to 32 under 35 U.S.C. § 103(a). We reverse each of these rejections.

The Examiner relies on the Enmanji and Barzynski references to "establish the reactive properties of the leuco dyes". (Answer, p. 9). The Examiner relies on Izu and Hu to establish that "oxygen permeability is an inherent property of organic protective layer[s]." (Answer, p. 10).

The Enmanji, Barzynski, Izu and Hu references do not remedy the flaw in the Examiner's reasoning identified above. The reactive properties of the leuco dyes disclosed by Enmanji and Barzynski, does not provide motivation to use a reactive layer disposed between an oxygen permeable UV coating and the substrate layer of an optical recording media as required by the claimed subject matter. In addition, the teachings of Izu and Hu does not established that the protective layers comprising UV curable resins described by Nishida, Shinkai and Takagishi would necessarily, or inherently have oxygen permeability.

CONCLUSION

The rejections of claims 1 to 9, 20 to 23 and 26 to 29 under 35 U.S.C. § 103(a) as unpatentable over the combination of Rollhaus and either one of Nishida, Shinkai or Takagishi; claims 1 to 9, 11 to 14, 20 to 23, 26 to 29, 31 and 32 under 35 U.S.C. § 103(a) as unpatentable over the over the combination of

Rollhaus, Lawandy and either one of Nishida, Shinkai or Takagishi; claims 1 to 23 and 26 to 32 under 35 U.S.C. § 103(a) as unpatentable over the over the combination of Rollhaus, Lawandy and either one of Nishida, Shinkai or Takagishi, further combined with Enmanji and Barzynski; and claims 1 to 23 and 26 to 32 under 35 U.S.C. § 103(a) as unpatentable over the over the combination of Rollhaus, Lawandy and either one of Nishida, Shinkai or Takagishi, combined with Enmanji and Barzynski further combined with Izu and Hu are reversed.

REVERSED

BRADLEY R. GARRIS ***Administrative Patent Judge***	)
JEFFREY T. SMITH ***Administrative Patent Judge***	) **BOARD OF PATENT**) **APPEALS**) **AND**) **INTERFERENCES**
BEVERLY A. PAWLIKOWSKI ***Administrative Patent Judge***	)

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